Financial Markets and Institutions

Abridged 10th Edition

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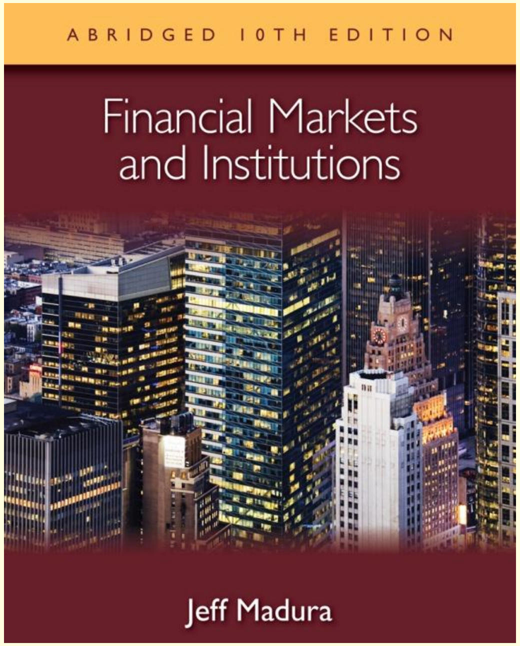

18 Bank Regulation

Chapter Objectives

- describe the key regulations imposed on commercial banks
- explain capital requirements of banks
- explain how regulators monitor banks
- explain the issues regarding government rescue of failed banks
- describe how the Financial Reform Act of 2010 affects commercial bank operations

Background

1. Bank regulation is needed to protect customers who supply funds to the banking system.
2. Many regulations were removed or reduced over time, which allowed banks to become more competitive.
3. Because of deregulation, banks have considerable flexibility in the services they offer, the locations where they operate, and the rates they pay depositors for deposits.
4. Some banks and other financial institutions engaged in excessive risk taking in recent years, which is one the reasons for the credit crisis in the 2008–2009 period.

Regulatory Structure

- Often referred to as a **dual banking system** because it includes both a federal and a state regulatory system.
- A charter from either a state or the federal government is required to open a commercial bank in the United States.
- A bank that obtains a state charter is referred to as a state bank; a bank that obtains a federal charter is known as a national bank.
- National banks are required to be members of the Fed. State banks may decide whether they wish to be members of the Federal Reserve System.

Regulatory Structure

Regulators

- National banks are regulated by the Comptroller of the Currency, while state banks are regulated by their respective state agency.
- Banks that are insured by the **Federal Deposit Insurance Corporation (FDIC)** are also regulated by the FDIC.

Regulation of Bank Ownership

- Commercial banks can be either independently owned or owned by a **bank holding company (BHC).**

Regulation of Deposit Insurance

- Federal deposit insurance has existed since the creation in 1933 of the FDIC in response to the bank runs that occurred in the late 1920s and early 1930s.
- The FDIC preserves public confidence in the U.S. financial system by providing deposit insurance to commercial banks and savings institutions.

- **Insurance Limits** - The specified amount of deposits per person insured by the FDIC was increased from $100,000 to $250,000 as part of the Emergency Economic Stabilization Act of 2008.
- **Risk-Based Deposit Premiums** - Banks insured by the FDIC must pay annual insurance premiums.

Regulation of Deposits

1. **DIDMCA** - Depository Institutions Deregulation and Monetary Control Act
   - Enacted to deregulate the banking (and other depository institutions) industry.
   - Also enacted to improve monetary policy.
2. **Garn-St. Germain Act**
   - Permitted depository institutions to offer money market deposit accounts (MMDAs).
   - Permitted depository institutions (including banks) to acquire failing institutions across geographic boundaries.

Regulation of Deposits (Cont.)

3. Interstate Banking Act

- Removed interstate branching restrictions and thereby further increased the competition among banks for deposits.
- Nationwide interstate banking enabled banks to grow and achieve economies of scale.

Regulation of Bank Loans

- **Regulation of Highly Leveraged Transactions**

  As a result of concern about the popularity of highly leveraged loans bank regulators monitor the amount of highly leveraged transactions (HLTs), loans in which liabilities are greater than 75 percent of assets.

- **Regulation of Foreign Loans**

  Monitor a bank’s exposure to loans to foreign countries.

- **Regulation of Loans to a Single Borrower**

  Banks are restricted to a maximum loan amount of 15 percent of their capital to any single borrower (up to 25 percent if the loan is adequately collateralized).

Regulation of Bank Loans

- **Regulation of Loans to Community**
  - Banks are regulated to ensure that they attempt to accommodate the credit needs of the communities in which they operate.
  - The **Community Reinvestment Act** (CRA) of 1977 (revised in 1995) requires banks to meet the credit needs of qualified borrowers in their community, even those with low or moderate incomes.

Regulation of Bank Operations

Regulation of Bank Investment in Securities

- Banks are not allowed to use borrowed or deposited funds to purchase common stock.
- Banks can invest only in bonds that are investment-grade quality (as measured by a Baa rating or higher by Moody's or a BBB rating or higher by Standard & Poor's).

Regulation of Bank Operations

Regulation of Securities Services

- The Banking Act of 1933 (**The Glass-Steagall Act**) separated banking and securities activities. Firms that accepted deposits could not underwrite stocks and corporate bonds.
- **Financial Services Modernization Act (The Gramm-Leach-Bliley Act)**
  - Repealed the Glass-Steagall Act.
  - Since 1999, there has been more consolidation of financial institutions.

Regulation of Insurance Services

- In 1998, regulators allowed the merger between Citicorp and Traveler's Insurance Group
- This paved the way for the consolidation of bank and insurance services.

Regulation of Bank Operations

Regulation of Off–Balance Sheet Transactions

- Bank exposure to off-balance sheet activities has become a major concern of regulators.
- Banks could be riskier than their balance sheets indicate because of these transactions.
- Regulation of Credit Default Swaps
    - Regulators increased their oversight of this market and asked commercial banks to provide more information about their credit default swap positions.

Regulation of the Accounting Process

- The Sarbanes-Oxley (SOX) Act was enacted in 2002 to ensure a transparent process for financial reporting.

Regulation of Capital

- Banks are subject to capital requirements, which force them to maintain a minimum amount of **capital** (or equity) as a percentage of total assets.
- Banks commonly boost their capital levels by retaining earnings or by issuing stock to the public.
- Banks can increase their capital by reducing their dividends.
- When bank regulators of various countries develop their set of guidelines for capital requirements, they are commonly guided by the recommendations in the Basel accords.

Basel I Accord

- 1988: The central banks of 12 major countries agreed to establish uniform capital requirements.
- Banks with greater risk are required to maintain a higher level of capital, which discourages banks from excessive exposure to credit risk.
- Banks required to have a capital ratio of at least 8 percent and a Tier 1 capital ratio of at least 4 percent.
- **Tier 1 capital** consists of shareholders' equity, retained earnings, and preferred stock
- **Tier 2 capital** includes loan loss reserves (up to a specified maximum) and subordinated debt.
- Assets are weighted according to risk.

Regulation of Capital

Basel II Framework

Refines risk measures and increases transparency.

- **Revising the Measurement of Credit Risk**

  Categories are refined to account for differences in risk levels.

- **Explicitly Accounting for Operational Risk**

  Initially, banks would be allowed to use their own methods for assessing their exposure to operational risk.

  The committee plans to develop a more sophisticated process for assessing operational risk over time.

- **Implementation of the Basel II Framework**

  Provisions of the Basel II framework are not directly enforceable.

Regulation of Capital

Basel III Framework

- Recommends narrowing the Tier 1 capital definition to include only retained earnings and common stock.
- Calls for higher capital requirements to offset bank exposure due to derivative positions.
- Recommends that banks boost their capital during favorable economic conditions in order to create a larger cushion for periods during weaker economic conditions.
- Recommends the use of stress tests to determine how a bank’s performance and capital level would be affected should economic conditions deteriorate..

Use of the VaR Method to Determine Capital Requirements

- The capital requirements to cover general market risk are based on the bank's own assessment of risk when applying a value-at-risk (VaR) model.
- A bank defines the VaR as the estimated potential loss from its trading businesses that could result from adverse movements in market prices.
- **Testing the Validity of a Bank's VaR** - assessed by comparing the actual daily trading gains or losses to the estimated VaR over a particular period.

Use of the VaR Method to Determine Capital Requirements (Cont.)

- **Limitations of the VaR Model**

  Generally ineffective at detecting the risk of banks during the credit crisis.

  The use of historical data from before 2007 did not capture the risk of mortgages because investments in mortgages during that period normally resulted in low defaults.

- **Bank-Imposed Stress Tests**

  Some banks supplement the VaR estimate with their own stress tests.

Use of the VaR Method to Determine Capital Requirements (Cont.)

- **Regulatory Stress Tests during the Credit Crisis**

  Forecasting the likely effect on the banks' capital levels if the recession existing at that time lasted longer than expected.

  Potential impact of an adverse scenario such as a deeper recession varies among banks.

- **Government Infusion of Capital during the Credit Crisis**

  The Troubled Asset Relief Program (TARP) addressed the financial problems experienced by financial institutions with excessive exposure to mortgages or mortgage-backed securities.

CAMELS Ratings

- Capital adequacy
- Asset quality
- Management
- Earnings
- Liquidity
- Sensitivity

Each characteristic is rated on a 1-to-5 scale, with 1 indicating outstanding and 5 very poor.

Banks with a composite rating of 4.0 or higher are considered to be problem banks.

How Regulators Monitor Banks

Capital Adequacy

- Because adequate bank capital is thought to reduce a bank's risk, regulators determine the capital ratio (typically defined as capital divided by assets).
- Banks with higher capital ratios are therefore assigned a higher capital adequacy rating.
- Fair value accounting is used to measure the value of bank assets.

How Regulators Monitor Banks

Asset Quality

- Each bank makes its own decisions as to how deposited funds should be allocated, and these decisions determine its level of credit (default) risk.
- The Fed considers "the 5 Cs" to assess the quality of the loans extended by a bank, which it is examining:
  - **Capacity** - the borrower's ability to pay.
  - **Collateral** - the quality of the assets that back the loan.
  - **Condition** - the circumstances that led to the need for funds.
  - **Capital** - the difference between the value of the borrower's assets and its liabilities.
  - **Character** - the borrower's willingness to repay loans as measured by its payment history on the loan and credit report.

How Regulators Monitor Banks

Management

Regulators specifically rate the bank's management according to administrative skills, ability to comply with existing regulations, and ability to cope with a changing environment.

Earnings

A profitability ratio used to evaluate banks is return on assets (ROA), defined as after-tax earnings divided by assets.

Liquidity

If existing depositors sense that the bank is experiencing a liquidity problem, they may withdraw their funds, compounding the problem.

How Regulators Monitor Banks

Sensitivity

Regulators assess the degree to which a bank might be exposed to adverse financial market conditions.

Limitations of the CAMELS Rating System

- Because there are so many banks, regulators do not have the resources to closely monitor each bank on a frequent basis.
- Many problems go unnoticed.

Corrective Action by Regulators

- Regulators may examine banks frequently and and discuss with bank management possible remedies
- Regulators may request that a bank boost its capital level or delay its plans to expand.
- They can require that additional financial information be periodically updated to allow continued monitoring.
- They have the authority to remove particular officers and directors of a problem bank if doing so would enhance the bank’s performance.
- They can take legal action against a problem bank if the bank does not comply with their suggested remedies.

Funding the Closure of Failing Banks

- If a failing bank cannot be saved, it will be closed.
- When liquidating a failed bank, the FDIC draws from its Deposit Insurance Fund to reimburse insured depositors.
- The cost to the FDIC of closing a failed bank is the difference between the reimbursement to depositors and the proceeds received from selling the failed bank's assets.

Government Rescue of Failing Banks

Argument for Government Rescue

If all financial institutions that were weak during the credit crisis had been allowed to fail without any intervention, the FDIC might have had to use all of its reserves to reimburse depositors.

How a Rescue Might Reduce Systemic Risk

- The financial problems of a large bank failure can be contagious to other banks.
- The rescue of large banks might be necessary to reduce systemic risk in the financial system, as illustrated next.

Government Rescue of Failing Banks

Argument against Government Rescue

- When the federal government rescues a large bank, it sends a message to the banking industry that large banks will not be allowed to fail.
- Some critics recommend a policy of letting the market work, meaning that no financial institution would ever be bailed out.

Government Rescue of Bear Stearns

- Bear Stearns had facilitated many transactions in financial markets, and its failure would have caused liquidity problems
- The Fed provided short-term loans to Bear Stearns to ensure that it had adequate liquidity.

Failure of Lehman and Rescue of AIG

- In September 2008, Lehman Brothers was allowed to go bankrupt without any assistance from the Fed even though American International Group (AIG, a large insurance company) was rescued by the Fed.
- One important difference between AIG and Lehman Brothers was that AIG had various subsidiaries that were financially sound at the time, and the assets in these subsidiaries served as collateral for the loans extended by the federal government to rescue AIG.
- The risk of taxpayer loss due to the AIG rescue was low.

Financial Reform Act of 2010

Mortgage Origination

Requires that banks and other financial institutions granting mortgages verify the income, job status, and credit history of mortgage applicants before approving mortgage applications.

Sales of Mortgage-Backed Securities

Requires that financial institutions that sell mortgage-backed securities retain 5 percent of the portfolio unless it meets specific standards that reflect low risk.

Financial Stability Oversight Council

Responsible for identifying risks to financial stability in the United States and makes recommendations that regulators can follow to reduce risks to the financial system.

Financial Reform Act of 2010

Orderly Liquidation

- Assigned specific regulators to determine whether any particular financial institution should be liquidated.
- Calls for the creation of an orderly liquidation fund that can be used to finance the liquidation of any financial institution that is not covered by the FDIC

Consumer Financial Protection Bureau

- Responsible for regulating consumer finance products and services offered by commercial banks and other financial institutions, such as online banking, checking accounts, and credit cards.

Financial Reform Act of 2010

Limits on Bank Proprietary Trading

Mandates that commercial banks must limit their proprietary trading, in which they pool money received from customers and use it to make investments for the bank's clients.

Trading of Derivative Securities

Requires that derivative securities be traded through a clearinghouse or exchange, rather than over the counter.

Global Bank Regulations

- Each country has a system for monitoring and regulating commercial banks.
- Most countries also maintain different guidelines for deposit insurance.
- Differences in regulatory restrictions give some banks a competitive advantage in a global banking environment.

SUMMARY

- Banks must observe regulations on the deposit insurance they must maintain, their loan composition, the bonds they are allowed to purchase, and the financial services they can offer. In general, regulations on deposits and financial services have been loosened in recent decades in order to allow for more competition among banks.
- Capital requirements are intended to ensure that banks have a cushion against any losses. The requirements have become more stringent and are risk adjusted so that banks with more risk are required to maintain a higher level of capital.

SUMMARY (Cont.)

- Bank regulators monitor banks by focusing on six criteria: capital, asset quality, management, earnings, liquidity, and sensitivity to financial market conditions. Regulators assign ratings to these criteria in order to determine whether corrective action is necessary. When a bank is failing, the FDIC or other government agencies consider whether it can be saved. During the credit crisis, many banks failed and also Lehman Brothers failed, but the government rescued American International Group (AIG). Unlike Lehman brothers, AIG had various subsidiaries that were financially sound at the time, and the assets in these subsidiaries served as collateral for the loans extended by the government to rescue AIG.

SUMMARY (Cont.)

- In July 2010, the Financial Reform Act was implemented. It set more stringent standards for mortgage applicants, required banks to maintain a stake in the mortgage portfolios that they sell, and established a Consumer Financial Protection Bureau to regulate consumer finance products and services offered by commercial banks and other financial institutions.